

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 16

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte CHAN-CHIH D. CHEN, JEAN-MARC P.
DELAVAUX, STEPHEN W. GRANLUND, SUN-YUAN
HUANG, KHANH C. NGUYEN and
KATHERINE A. YANUSHEFSKI

Appeal No. 97-1163
Application 08/200,044¹

ON BRIEF

Before LEE, TORCZON and CARMICHAEL, Administrative Patent Judges.

LEE, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal under 35 U.S.C. § 134 from the examiner's final rejection of claims 1, 3-7 and 9-14.

¹ Application for patent filed February 22, 1994.

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Claims 2 and 8 have been cancelled. No claim has been allowed.

Reference relied on by the Examiner

Albanese
1987

4,683,573

July 28,

The Rejections on Appeal

Claims 1, 3-7 and 9-14 stand finally rejected under 35 U.S.C. § 112, first and second paragraphs.

Claims 1, 3 and 12 stand finally rejected under 35 U.S.C. § 103 as being unpatentable over Albanese.

The Invention

The invention is directed to a laser module. Claims 1 and 12 are the only independent claims. Claim 12 specifically recites a first and a second laser and does not recite any cooling apparatus. Claim 1 specifically recites a first and a second thermoelectric cooling apparatus but does not expressly recite a laser. Claims 1 and 12 are reproduced below:

1. A laser module comprising:

first and second thermoelectric cooling apparatus, said first and second cooling apparatus being connected in series;

first and second variable resistances, and first and second variable resistances being connected in series and

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being connected in parallel with said first and second cooling apparatus, respectively; and

a microcontroller connected to said first and second variable resistances and controlling said first and second variable resistances.

12. A laser module comprising:

first and second lasers, said lasers being connected in series;

first and second variable resistances, said first and second variable resistances being connected in series and being connected in parallel with said first and second lasers, respectively; and

a microcontroller connected to said first and second variable resistances and controlling said first and second variable resistances.

Opinion

We reverse.

Our opinion is based only on the positions as expressed by the examiner. We do not undertake to perform examination de novo based on prior art, even those already of record. Our reversal of the rejections on appeal should not be construed as a pronouncement that the claimed invention is patentable over prior art including the same reference relied on by the examiner.

The rejection under 35 U.S.C.
§ 112, first and second paragraphs

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The rejection of claims 1, 3-7, and 9-14 under 35 U.S.C. § 112, first paragraph, is summarily reversed. The examiner has not made any showing of why the specification is either (1) without an **enabling** disclosure for the claimed invention, (2) without an adequate **written description** of the claimed invention, or (3) fails to disclose the **best mode** as contemplated by the inventors.

Evidently, the real rejection is under 35 U.S.C. § 112, second paragraph, for being vague and indefiniteness, which we also cannot sustain.

It is not the role of claims to explain how the invention works or how it may be constructed and made to operate. That is the purpose of the specification. The claims merely define the metes and bounds or the scope of coverage of the invention sought to be protected. In our view, the claims clearly define, in no uncertain terms, what is within their scope and what is not. While the claims are indeed broad, breadth of claim should not be confused with indefiniteness. In re Miller, 441 F.2d 689, 693, 169 USPQ 597, 600 (CCPA 1971); In re Gardner, 427 F.2d 786, 788, 166 USPQ 138, 140 (CCPA 1970).

The examiner's position on complete or incomplete claiming is also misplaced. There is no requirement that a claim must recite every element that is needed to somehow complete an actually operating device. In Hughes Aircraft Co. v. United States, 215 USPQ 787, 796 (Ct. Cl. 1982), the Court of Claims upheld the validity of claims drawn to a satellite system but which did not recite a ground controller which was necessary to make the system operate for its intended purpose. The Court reiterated a previous statement from Hughes Aircraft Co. v. United States, 640 F.2d 1193, 1197, 208 USPQ 785, 789 (Ct. Cl. 1980), that "it is not necessary to claim in a patent every device required to enable the invention to be used." We recognize no statutory basis for holding as unpatentable claims which do not recite every "essential" element without which the claimed invention would not or could not operate. We follow the Court of Claims's stated position in Hughes Aircraft Co., 640 F.2d at 1197, 208 USPQ at 789, that it is not necessary to recite in a claim every element which may be required in order to enable operation of the claimed invention. For example, if a motor vehicle is claimed, it may not be necessary to recite a steering device although a motor

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vehicle needs one to operate, and if a helicopter is claimed, it may not be necessary to recite a tail rotor even though the aircraft needs it to fly.

For the foregoing reasons, we also do not sustain the rejection of claims 1, 3-7, and 9-14 under 35 U.S.C. § 112, second paragraph, as being indefinite.

The rejection for obviousness
over the Albanese reference

The initial burden is on the examiner to establish a *prima facie* basis to reject the claims. In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992); In re Piasecki, 745 F.2d 1468, 1472, 223 USPQ 785, 788 (Fed. Cir. 1984). The examiner must provide an adequate factual basis to support an obviousness conclusion. See e.g., In re Fine, 837 F.2d 1071, 1073, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988); In re Warner, 379 F.2d 1011, 1016, 154 USPQ 173, 178 (CCPA 1967). Here, the examiner has failed to present a reasonable explanation as to why the evidence establishes a *prima facie* case of obviousness. The necessary burden has not been met.

The examiner is expected to make the underlying factual determinations as set forth in Graham v. John Deere Co., 383

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U.S. 1, 17, 148 USPQ 459, 467 (CCPA 1966) and to provide reasons why one with ordinary skill in the art would have been led by the prior art to arrive at the claimed invention. Such reasons must stem from some teaching or suggestion in the prior art as a whole. Uniroyal, Inc. v. Rudkin-Wiley Corp., 837 F.2d 1044, 1051, 5 USPQ2d 1434, 1438 (Fed. Cir.), cert. denied, 488 U.S. 825 (1988); Ashland Oil, Inc. v. Delta Resins & Refractories, Inc., 776 F.2d 281, 293, 227 USPQ 657, 664 (Fed. Cir. 1985), cert. denied, 475 U.S. 1017 (1986); ACS Hospital Systems, Inc. v. Montefiore Hospital, 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984). These showings by the examiner are an essential part of complying with the burden of presenting a prima facie case of obviousness.

Here, we find that the examiner failed to determine and appreciate all the differences between the appellants' claimed invention and the applied prior art reference, Albanese. Specifically, claim 1 recites two variable resistances which are not only in series with each other, but also each connected in parallel with a corresponding one of the cooling apparatus (claim 1) or laser (claim 12). Albanese does not disclose series connected variable resistances, specifically

series-connected variable resistances which are respectively coupled in parallel to a corresponding one of two series-connected cooling apparatuses or lasers. The invention is more than merely connecting two cooling apparatuses (claim 1) or two lasers (claim 12) in series. Clearly, several features of the claimed invention have not been adequately accounted for.

The examiner's approach improperly puts the burden on appellants to demonstrate nonobviousness. Under 35 U.S.C. § 102, a patent shall issue unless the examiner has established one of the basis for refusing the issuance of a patent. It is not enough to reject these claims simply because variable resistances are known, cooling apparatuses are known, lasers are known, microcontrollers are known, and series and parallel connections are known. It is the "combination" of elements as recited by the appellants which must be rendered obvious. If it is the examiner's view that a well known way to control devices connected in series is by way of series-connected variable resistances which are each positioned in parallel with a corresponding one of the controlled devices, a citation to some reference, e.g., text

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book, would be needed, as well as an explanation why one would apply that knowledge to two series connected lasers or cooling apparatuses.

Furthermore, it should be noted that the mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification. In re Fritch, 972 F.2d 1260, 1266, 23 USPQ2d 1780, 1783-84 (Fed. Cir. 1992). It is impermissible to use the claimed invention as an instruction manual or "template" to piece together the teachings of the prior art so that the claimed invention is rendered obvious. In re Fritch, 972 F.2d at 1266, 23 USPQ2d at 1784.

For the foregoing reasons, we do not sustain the obviousness rejection of the claims on appeal over Albanese.

Conclusion

The rejection of claims 1, 3-7 and 9-14 under 35 U.S.C. § 112, first and second paragraphs, is reversed.

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The rejection of claims 1, 3 and 12 under 35 U.S.C. § 103
as being unpatentable over Albanese is reversed.

REVERSED

JAMESON LEE)	
Administrative Patent Judge)	
)	
)	BOARD OF PATENT
RICHARD TORCZON)	
Administrative Patent Judge)	APPEALS AND
)	
)	INTERFERENCES
)	
JAMES T. CARMICHAEL)	
Administrative Patent Judge)	

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S. H. Dworetsky
AT&T Bell Laboratories
600 Mountain Avenue
P. O. Box 636
Murray Hill, NJ 07974-0636